

What is the FAA doing to ensure that critical human factors issues are addressed in the acquisition and integration of 100% of new and modified aviation systems? **(AAR-100)**

Four strategies have been identified to ensure that human factors issues are addressed in the acquisition and integration of 100% of FAA aviation systems and applications. These strategies cover human factors policy, processes, tools, and assessments. The following presents an overview of the strategies, including each strategy's associated activities and, pending FY-99 funding, implementation dates.

Strategy 1: Policy. Institutionalize HF policies that will contribute to ensuring HF issues are addressed in the acquisition and integration of 100% of FAA aviation systems and applications by 2005.

Report on Status:

- 1) AMS guidance changes:
  - 2 have been implemented (lessons learned, activities flowchart)
  - 1 has been coordinated (investment analysis)
  - 2 have been proposed (mission analysis; SOW generator)
- 2) A proposal for integration of human factors, human resources, and related union issues in the AMS is under review and consideration by IPLT Human Factors Subteam.

Strategy 2: Processes. Institutionalize HF processes that will contribute to ensuring human factors issues are addressed in the acquisition and integration of 100% of FAA aviation systems and applications by 2005.

Report on Status:

- 1) Placement of specialists: 1 new hire and 3 other human factors specialists were placed to support key programs/IPTs (i.e., AND, FFP1, STARS-EDC, CPDLC)
- 2) Concepts for the development of Emulation Prototype capabilities were initiated in January 1999 (e.g., signed procurement document; funding allocated)
- 3) A Human Factors Engineering Process Area was developed, coordinated, revised and submitted on Jan. 27, 1999 for incorporation in the FAA iCMM

Strategy 3: Human Factors Conventions, Guidelines, and Tools. Develop, implement, and support HF conventions, guidelines, and tools which contribute to ensuring human factors issues are addressed in the acquisition and integration of 100% of FAA aviation systems and applications by 2005.

Report on Status:

- 1) Concepts for additions to the FAA Human Factors Design Guide have been coordinated with the Technical Center in January 1999
- 2) Human factors input to standards in the FAA Technical Reference Model was initiated in January 1999
- 3) Concepts for training include three strategies:
  - HF Orientation/Overview (e.g., embedded in FAMS training; awareness training)
  - Specialized Technical Training (e.g., 2-hour presentation on color in ATC systems)
  - Tailored and Integrated Training (e.g., conducted with HF Assessments – Strategy #4)

Strategy 4: Assessments. Conduct human factors assessments for the acquisition and integration of 100% of FAA aviation systems and applications by 2005.

Report on Status:

- 1) Initial high-level assessments were conducted to determine the FY99 targeted programs. Targeted programs were assessed to be high cost, high risk, and high visibility with significant human/machine interface considerations. Targeted programs include Eunomia, HOCSR, STARS, OASIS, CPDLC, and FFP1. STARS EDC TCW HF assessments were completed. NIMS had originally been considered as a targeted program. However, due to recent changes in that program it has been excluded. HOCSR will replace it as a targeted program.